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(54) Title: PRE-PLATING SURFACE TREATMENTS FOR ENHANCED GALVANIC-CORROSION RESISTANCE

(57) **Abstract:** The invention relates to a method that involves (a) removing graphite from at least one surface of a metal graphite composite material; (b) chemically cleaning or plasma etching the surface of the metal graphite composite material; (c) applying a metal-containing material to the surface of the chemically cleaned or plasma etched metal graphite composite material, and thereby forming an intermediate layer; (d) applying a metal coating on the intermediate layer, and thereby forming a composite material. The invention also relates to a composite material comprising (a) a metal graphite composite substrate having at least one surface that is substantially free of graphite; (b) a metal-containing intermediate layer located on a surface of the substrate; and (c) a metal coating on the intermediate layer.

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